



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,862	10/20/2003	Charles Dudley Copper	17921 (AT20958-1029)	6929

7590 05/10/2004

Michael J. Aronoff  
Tyco Electronics Corporation  
Suite 140  
4550 New Linden Hill Road  
Wilmington, DE 19808

EXAMINER

GILMAN, ALEXANDER


ART UNIT

PAPER NUMBER

2833

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/690,862	<b>Applicant(s)</b> COPPER ET AL.	
	<b>Examiner</b> Alexander D Gilman	<b>Art Unit</b> 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 20 October 2003.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☒ Claim(s) 18 and 19 is/are allowed.

6) ☒ Claim(s) 1-4, 6-8, 10, 11 and 13-17 is/are rejected.

7) ☒ Claim(s) 5, 9 and 12 is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
       Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
       Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
       a) ☐ All    b) ☐ Some \*    c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
       Paper No(s)/Mail Date 10/30/2003.

4) ☐ Interview Summary (PTO-413)  
       Paper No(s)/Mail Date. \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: \_\_\_\_\_.

Art Unit: 2833

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, lines 2-3 recites "said third wall tapered along a lower edge thereof". It is unclear from claims 1 and 3 the disposition of the lower edge of the third wall.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 6, 7, 8, 10, 11, 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki .

With regard to claim 1, Suzuki (US 6,325,680) discloses an electrical contact (2) comprising:

a body having a first wall and a second wall opposed to said first wall;

a rigid lance (46) integrally formed with said first wall and projecting away from said second wall; and

a deflectable biasing beam (50) integrally formed with said second wall and extends away from said first wall in a direction opposite to said lance.

With regard to claim 2, Suzuki discloses that said second wall (50) extends obliquely to said first wall.

With regard to claim 4, Suzuki discloses that said first wall further comprises a contact beam (32) extending downwardly from said first wall.

Art Unit: 2833

With regard to claim 6, Suzuki discloses at least one side wall (8), said side wall extending above a top surface of said first wall.

With regard to claim 7, Suzuki discloses that said body is substantially rectangular.

With regard to claim 8, Suzuki discloses that said body comprises a longitudinal axis, said biasing beam (50) tapered along said longitudinal axis.

With regard to claim 10, Suzuki discloses an electrical connector system comprising:

at least one housing (100) comprising a longitudinal cavity therein; and

an electrical contact (2) situated within said cavity;

wherein said contact comprises:

opposed top and bottom walls; a rigid lance (46) integrally formed with said top wall, said lance in abutting contact with a portion of the said housing; and

a deflectable biasing beam (50) extending from said bottom wall and

said biasing beam contacting a portion of said housing and providing a biasing retention force thereto to maintain said contact in position relative to said housing.

With regard to claim 11, Suzuki discloses that said contact (2) comprises:

a body having said opposed top and bottom walls; said rigid lance integrally formed with said top wall and projecting outward therefrom, said lance in abutting contact with a portion of said contact cavity;

and

said deflectable biasing beam (50) integrally formed with said bottom wall and

extending outward therefrom, said biasing beam contacting a portion of said contact

cavity and providing a biasing retention force thereto to maintain said contact in position relative to said housing.

With regard to claim 14, Suzuki discloses that said rigid lance (46) is integrally formed with said contact.

With regard to claim 15, Suzuki discloses that said biasing beam (50) is integrally formed with said contact.

With regard to claim 16, Suzuki discloses that said contact comprises a contact body, said biasing beam extending from a leading end of said contact body.

Art Unit: 2833

With regard to claim 17, Suzuki discloses that said housing comprises a retention window (138).

Claims 10, 13, are rejected under 35 U.S.C. 102(b) as being anticipated by Shirouzu et al

With regard to claim 10, Shirouzu et al (US 6,390,860) disclose (Fig. 1-4) an electrical connector system comprising:

at least one housing (10) comprising a longitudinal cavity therein; and

an electrical contact (30) situated within said cavity;

wherein said housing comprises:

opposed top and bottom walls; a rigid lance (portion of 13 close to 20) integrally formed with said top wall, said lance in abutting contact with a portion of the said contact; and

a deflectable biasing beam (17) extending from said bottom wall and said biasing beam contacting a portion of said contact and providing a biasing retention force thereto to maintain said contact in position relative to said housing.

With regard to claim 13, Shirouzu et al (US 6,390,860) disclose that said biasing beam is located on said housing, said biasing beam contacting a bottom of said contact.

#### ***Allowable Subject Matter***

Claims 18, 19 are allowed.

Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 5, 9, 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No prior art has been found to anticipate or render obvious the presently claimed subject matter.

Specifically, none of the prior art of record discloses the combination of the limitations presented including the tapered configuration of the third wall (claim 3);

Art Unit: 2833

one of the pair of side walls comprising a contact beam extending into said pin cavity (claims 5,9, 18);  
the contact comprising a retention window receiving said rigid lance (claim 12).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

04/29/2004



**ALEXANDER GILMAN**  
**PRIMARY EXAMINER**